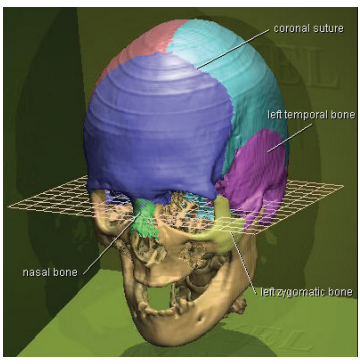
The Visible Humans

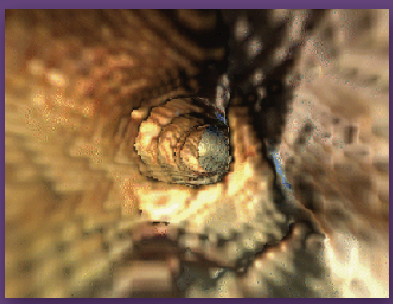
When a Texas death-row inmate donated his body to science, little did he know that it would be frozen, electronically scanned, digitally photographed and reformatted into a vast computer file. Today, that inmate and a Maryland housewife have achieved immortality in cyberspace as virtual cadavers, the Visible Humans. Their legacy has been spectacular. To date, the Library has granted nearly 3,000 licenses to organizations and individuals all over the world to use the visible human data sets for a wide variety of purposes.



SURGICAL SIMULATION

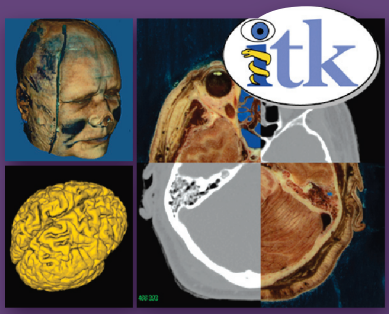
VOXEL-MAN provides state of the art surgery simulators and virtual body models using simulation software. This unique tool, developed by engineers at the University of Hamburg's Institute of Mathematics and Computer

Science in Medicine (Germany), is used to train and plan for surgical navigation. It provides unlimited repeatability of surgical procedures and reduces the use of cadavers for training purposes. This virtual surgical software simulates the haptic feeling of a real pointer allowing complicated surgeries to be rehearsed in advance.



VIRTUAL COLONOSCOPY

Using data sets from the Visible Human, computer scientists at SUNY Stony Brook's Visualization Laboratory perfected computer based algorithms used to perform a virtual colonoscopy. This new method may reduce the cost, time and discomfort of colonoscopy screening. Colon cancer is the second leading cause of cancer deaths in the United States.



INSIGHT TOOL KIT — ITK

Software developers have assembled programming tools for analyzing the Visible Human Data. The Insight ToolKit (ITK), is a collection of image processing algorithms used for surgical planning, electron microscopy, and the analysis of astrophysical data. ITK is used at distinguished institutions as the Mayo Clinic, the Harvard-Smithsonian Center for Astrophysics, and the National Cancer Institute Advanced Biomedical Computing Center. It has 1,500 subscribers in over 40 countries. ITK is in use on data from individual cells to humans.

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